

CONVOCATION '97

~ MAY 26, 1997 ~

HONOUR, GLORY AND STUDENT PRANKS

From hurling chestnuts to lighting firecrackers, graduands have put their mark on convocation

BY JOHN ALLEMANG

PHOTOGRAPHY BY SUZIE KING

The following is an excerpt from an article to appear in the summer issue of the U of T Magazine:

THE GRADUANDS and their families who gather for convocation in June see the university at its most beautiful. And also at its steamiest: the upper reaches of Convocation Hall have been known to reach a sauna-like 38 Celsius (100 Fahrenheit) — which feels even hotter if you're wearing a dress suit and academic gown. But come the 1998 convocations, degree ceremonies will no longer be a cruel pun, thanks to an \$850,000 donation from Joey and Toby Tanenbaum that will bring the wonders of air-conditioning to the turn-of-the-century hall....

The early days of convocation were considerably more raucous than the serene ceremonies of today: students in the upper balcony, when they weren't chanting caustic verses or mocking those going forward to accept their degrees, liked to hurl chestnuts and bags of flour at the dignitaries down below. In 1888 University College president Sir Daniel Wilson (later president of the university) had the idea of co-opting the students by installing the University College Glee Club on the upper level and holding them responsible for any student disorder. "The songs were a relief to our somewhat formal routine," Wilson wrote in his diary, "and the legitimizing of the singing enlisted the best men on the side of order."

By 1890 Toronto students were starting to seem almost angelic in their devotion to the Alma Mater. When fire gutted University College and its Convocation Hall that year, the *Toronto Mail* reported, "The members of the class of '90 (including the university's first woman MA) specially asked that the proceedings of this important day in their history should be conducted as near the college ruins as possible...."

A tent was erected on the lawn and 1,200 people squeezed in for the ceremonies, with hundreds more listening from outside.

Still, the natural exuberance of the undergraduate population was hard to suppress. At the fall convocation of 1898 the sophomore class sneaked out of the ceremonies early and assaulted the freshmen as they emerged later, throwing them into the muddy Taddle Creek ravine (Varsity Boys Make

Convocation Hall, outside and in, has seen its fair share of shenanigans over the years from overly enthusiastic graduates to visitors that blast instead of clapping. Built in 1906, the hall has held thousands of proud parents and students, not to mention a cast of national and international dignitaries. Next year the audience and participants alike should enjoy the ceremonies even more, thanks to the wonders of modern air-conditioning.

pass the time he used to exchange notes with the university organist who sat behind him on stage. During a Victoria College convocation in the free-and-easy 1960s, Bissell contemplated the procession of female graduates who'd so obviously shaken off the college's stern Methodist heritage and then passed a note that read: "John Wesley, whom may the Lord bless, / Deplored all sin and wantonness. / Surely he would banish hence / Victorian mini and hot pants...."

The procession from University College to Convocation Hall across the green grass of the front campus, overseen by theatrically minded students, often from the Graduate Centre for Study of Drama, is a mainstay of U of T ceremonial. But the picturesque walk in the reasonably dependable June sunshine was curtailed for two years in the 1920s as the university's population surged and the marshalling halls at University College could no longer hold all the graduands. After complaints from students, the procession was restored in 1926.

Fall convocations, however, start at Knox College, allowing

for a quick walk through the brisk November breezes. Less scenic, perhaps, but according to convocation records, an increasing number of students are choosing fall over spring.

Then there's the U of T degree ceremony held in Hong Kong, launched last November (and to be repeated this year), it marked the first time in U of T history that a graduation was held outside Canada.



UNIVERSITY GRADUATES FORGE

They sing opera, volunteer with the physically and developmentally challenged,

SARAH RAMKISSOON

By KERRY DELANEY

SARAH RAMKISSOON IS A YOUNG WOMAN WHO KNEW EXACTLY what she wanted by the tender age of 11. The native Trinidadian, on a family holiday to Toronto at the time, set her sights on U of T. A cousin, whom she was visiting and who was attending the university, described it in glowing terms; Ramkissoon's mind was made up.

Four years later Ramkissoon, her mother and brother moved to Toronto and her goal became attainable. In 1994 she completed an honours bachelor of science program with a double major in psychology and English and a minor in chemistry. After taking a year off she entered the master's of social work program from which she graduates this spring.

Ramkissoon's interest in social work can be traced to her volunteer activities at the Bob Rumball Centre for the Deaf. When she was 17 she began working part-time at the centre, assisting hearing-impaired individuals with communication as well as teaching them basic living skills and providing emotional counselling. In December of 1993 she took up full-time residence at one of the centre's group homes.

She has also been very active in the student and academic life of the Faculty of Social Work including her work as a research assistant, her tenure as treasurer of social work's graduate student association and her position as editor of the student newsletter. Along with students in the social work programs at Ryerson and York, she helped launch the Tri-University Initiative aimed at enhancing links among the students. One of its first projects involved tracking and disseminating information about the impact of provincial government policies on the poor and minorities.

Although Ramkissoon is now a social work alumna and, in fact, will be editing the alumni newsletter, she hopes her student days are not yet over. In the future she would like to enter the human and computer interaction program in the Department of Computer Science; eventually she wants to launch a career designing software specifically for the social work profession.

There is no doubt that her eight years at the university can be described as varied, however, there has been one constant throughout — her love of the campus. "U of T has the most beautiful campus in the world," Ramkissoon says. "I thought the only school that might rival it is Cambridge, but I've been to Cambridge and it doesn't compare. What to me is particularly amazing is that it's in the middle of the city but you don't feel the influence of the city. Here I can feel the sense of history, the sense of timelessness."

NICHOLAS PANOU

By JANE STIRLING

YEARS FROM NOW WHEN NICHOLAS PANOU RETURNS TO Erindale College for reunions or a walk around old haunts, he will be able to point to the mark he made on campus — a mark he made not by himself but with the help of six other people. For Panou, a graduating student in commerce, was a member of the team that selected the design of the new student centre.

The student centre will be the "geographic focus for student life on campus," he says. When it opens it will feature student offices, meeting spaces, lounges, a cafe, pub and store. "I'm very excited about it

and keen to see it built," he says.

Undoubtedly Panou feels a certain sense of responsibility for the centre, tentatively set to open in the fall of 1998. He was involved in its kickoff campaign four years ago and served as a member of the users' group that determined students' needs. It seemed logical then that he should be a member of the jury that selected the design and architectural firm.

Participating on the selection committee was an enlightening experience. The panel included four internationally recognized architects whose criteria for approval or rejection of a design was based to a large degree on style. "They would ask, 'Why does this building have a curve here and a straight edge there?' I'd just shrug. It wasn't something I had really thought much about but it was very important to them."

He and his colleagues whittled the list of 100 contenders down to two over a period of three days. The decision came down to a choice

accepted into an MBA program this fall; farther down the road his path may lead to municipal politics. And while his stint as an architectural jury judge is unlikely to lead to a future vocation, he is delighted he had the chance to participate. "It's as though I had a say in improving the quality of student life at Erindale. That's very gratifying."

ELIZABETH BROWN

By CHRISTINA MARSHALL

AT 38 INVESTMENT BANKER ELIZABETH BROWN HAD A LIFE many of us dream about. From business lunches in Paris and hospitality tents at Wimbledon to meeting with clients on safari in Kenya, her work at a prestigious firm took her around the world.

But it was not Brown's dream. Since childhood she had longed to be a doctor. After much soul searching she resigned from her lucrative position to pursue a career in medicine. "I haven't regretted the decision for a moment," she says with infectious excitement.

Born and raised in Ottawa, Brown initially opted for a humanities program at Carleton University, believing she did not have strong math and physics skills — both prerequisites for medical school.

She began Soviet and east European studies, travelling to Leningrad (now St. Petersburg) on an international exchange program for her master of arts thesis. During studies in Geneva, Switzerland, for her second post-graduate degree — a master of arts in law and diplomacy — she accepted a position with the Export Development Corp. in Ottawa. It wasn't long before

she was managing bond issues of up to a billion dollars (US) a year.

And this was just the beginning. Recruited by investment bankers J.P. Morgan & Co. Inc. in 1984, Brown earned a series of job promotions that took her to London, U.K., for seven years and eventually to Manhattan where she became a vice-president, earning an incredible salary.

"But I wasn't happy," reflects Brown. When a family member for whom she had been caring died of brain cancer she began to question the meaning of her life. She wrote out a list of her strengths and weaknesses in an attempt to find a more satisfying career. "Everything pointed to medicine. I had done well in banking because of my strong interpersonal and communication skills and I could see these attributes were also necessary to be a successful physician."

Feeling confident that her dream could become reality, she resigned from J.P. Morgan and left New York, heading for U of T. Enrolled at the undergraduate level, she took biology, physics, inorganic and organic chemistry — courses she dreaded so much in high school. "It was hard work but a lot more fun than I expected," she says.

Once accepted into medical school, there were new challenges. Her first class was anatomy — an 8 a.m. wake-up call where she was required to dissect a cadaver on her first day. "I had never even seen a dead body before."

Now 44, Brown has completed four years of medical school and plans a residency in family practice. "It has been a fabulous experience," she reflects. "It's important to pursue a career that brings you happiness. If at all possible, don't let circumstance stop you."



Sarah Ramkissoon:
*Student activist
with social conscience*

Nicholas Panou:
*Erindale and
student centre booster*

Elizabeth Brown:
*From investment banker
to family doctor*

between what he calls an open design — plenty of windows, light and space — and a closed one "that was not as welcoming from the outside." The jury came to "a meeting of the minds" regarding style versus function and agreed the centre needed an open and social design, he says.

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Panou's membership on the committee was but one of his many extracurricular involvements at the Mississauga campus. The Erindale boarder served as president, clubs administrator and college affairs commissioner of the student union, sat on college council for four years, chaired the operations committee of Radio Erindale and was president of the campus Young Liberals, among many other activities. "I really wanted to be involved in the college and feel I've made a difference in student life," he says.

It seems he has. He won a Principal's Award in 1995-96 for his contributions to the college and a Gordon Cressy Award in 1996-97 for student leadership.

While his future is still somewhat uncertain, he hopes to be

STEADY PATH TO FUTURE...

champion environmental issues and produce abstract works of art...

ISABEL BAYRAKDARIAN

BY SUZANNE SOTO

HOW CAN AN ENGINEER POSSIBLY BE AN ACCOMPLISHED soprano as well? It's a question that Isabel Bayrakdarian has had to answer many times since her singing hobby began leading to award-winning stage performances four years ago. "People used to come up to me after concerts to congratulate me but when they'd find out I was studying engineering they would invariably ask me if I was truly serious about music," says Bayrakdarian, graduating this spring with an honours BSc in biomedical engineering.

"Others," Bayrakdarian adds, "had the attitude that technically oriented folks just could not do artistic things. They would say, 'Being an engineer, how can you produce the sensitivity to sing?'"

At home members of her family worried she would abandon her engineering studies to pursue what seemed an unattainable dream — success in the highly competitive world of opera. "They wanted what was best for me and in their opinion it meant an engineering career. So I found I had to fight both external and internal battles and work very hard to prove to everyone that I could do both things well and at the same time."

By all accounts the bright and vivacious 22-year-old has more than proven she can do both very well. In her studies she has earned a degree in one of the most academically demanding fields of engineering. In her singing she has accumulated many impressive awards and performed on some of the top musical stages in North America. This year alone she won the New York Metropolitan Opera National Council Auditions and debuted on the Metropolitan Opera's stage. In February she gave a recital at Carnegie Hall and this fall will join the Canadian Opera Company Ensemble in its 1997-98 season.

Meeting challenges head-on is not new to Bayrakdarian. Born in Lebanon she spent her childhood and early adolescence in war-torn Zahle, near Beirut, in an environment she calls "totally chaotic and unfair." Her family was third-generation Armenian, which brought its own problems, among them feelings of neither belonging to nor being accepted into the Lebanese culture. When she was 15 her parents and five siblings relocated to Canada.

One of the goals Bayrakdarian's father instilled in his children was the importance of an education. She chose engineering partly because her engineer brother was a good role model and because a guidance counsellor recommended the profession after looking at her 92 per cent high school average.

As part of her studies Bayrakdarian spent 16 months acquiring professional experience as a process engineer at Celestica Inc., a major manufacturer of computer products. While she loved the challenging work, her heart lay elsewhere. "It is a bit scary" she says about her decision to forsake engineering for music. "There is so much I have yet to learn but I am just so excited about joining this field that I believe I'm doing the right thing. I'm on the right track and that's a great feeling."

TIMOTHY WELSH

BY MARGARET MACAULAY

FOR MANY OF THE 250 VOLUNTEERS AT THE SPECIAL Olympics World Winter Games in Toronto and Collingwood this year, it was their first experience working with developmentally challenged competitors.

For Timothy Welsh it was far from the first and even further

from the last. The Special Olympics are part of the field in which he has chosen to work.

Welsh, a graduating physical education student who played hockey with the Varsity Blues, has an older brother with a developmental disability. "There's no question that having a special brother got me interested; having that kind of exposure at home was a big reason I picked this field to study."

From his own experience as a volunteer-coach and his brother's experience as a competitor, Welsh knows that most individuals with special needs are keen and able to compete in sports. The emphasis of these contests, however, is not on winning. "Personal achievement is more important," he says. "The Special Olympics' motto, Let me win but if I cannot win, let me be brave in the attempt, is so true. There is more interest in being amongst a

Working with the developmentally challenged is a very rewarding experience, he says. "It's refreshing to coach individuals without an emphasis on winning. It's nice to see this attitude still exists."

MICHAEL FARLEY

BY BRUCE ROLSTON

IT IS AN INTERESTING LINGUISTIC FACT THAT THE WORD "compost" — the recycling of household waste — stems from the same linguistic root as "compose" — to create a

work of literature or music. In an etymological sense, at least, the maestro is one step removed from the garden ecologist.

These words have another connection in the person of Scarborough College graduate Michael Farley. His friends call him the Compost Crusader for his work in expanding the garbage recycling efforts in the Village at the college. But Farley's real interest lies beyond composting. University, for him, was a vital step in discovering what composes a meaningful existence. "My main goal is to find out how I can have the most benefit as a person."

At an early age Farley concluded that "finding himself" involved meeting a lot of people. After high school he spent several months with Canada World Youth, working in Venezuela. Later, when he heard about Scarborough's co-op program in international development, he thought he might find more answers there. "For me, international development work is also personal development work."

The program is hugely popular. Only 10 per cent of the 150 who apply every year are accepted. Students spend three years studying international

development issues at home and then apply what they've learned in a 12-month work term abroad. While at U of T, Farley became involved in championing the cause of composting in the Village, Scarborough's 500-student residence community. "Scarborough had spent a bit of money to put big composting bins around the Village. But it needed someone to promote it."

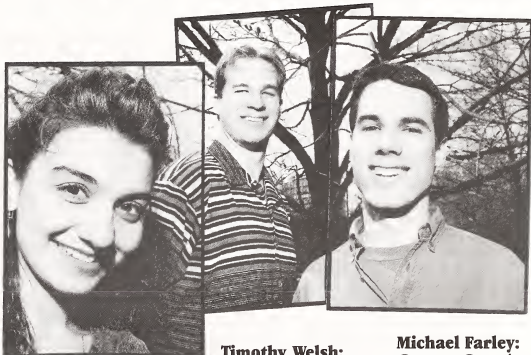
It won him his nickname: "People would see me lugging the small compost buckets and called me Compost Crusader." It also won him a \$10,000 government environmental grant to spend four months continuing the project.

By the time his work term arrived, Farley was able to pay his composting knowledge into a placement in Cuernavaca, Mexico. There, the Crusader learned the other side of community projects: sometimes you have to look past the pure results.

"I had a very fixed way of looking at composting," he says. "How many litres produced? How much waste diverted? But here it was more the process. What Cuernavaca needed was a project that got as many people involved in their community as possible. Compost was just the vehicle to mobilize marginalized people, to start them thinking what other actions they could take together."

In his last year Farley discovered a new interest: counselling students on coping with stress. Once again he found that helping others taught him important lessons about himself. "So much stress comes from needing to know what's going to happen in the future or regret about what could have happened. If you make a decision, you've really got to let it go. It's taught me a lot about living in the present."

So where will Farley go from here? The only certainty is it will be a highly personal journey. The biggest lesson the Compost Crusader learned while at U of T is that finding solutions for others is one way to better understand yourself.



Isabel Bayrakdarian:
*Engineering
a career in opera*

Timothy Welsh:
*Volunteer coach with
the Special Olympics*

Michael Farley:
*Compost Crusader
at Scarborough College*

group of people and having a lot of fun."

Welsh's interest spilled over into his school work at U of T. He wrote essays and research papers on coaching people with developmental disabilities and on biomechanical problems faced by these competitors.

There are very few universities in Canada that offer programs in working with special needs competitors so his options after Don Mills Collegiate were limited. However, he chose U of T because the reputation of the School of Physical and Health Education was, he notes, "exceptional."

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—TIMOTHY WELSH

Welsh has a fine record on the ice and off — a scholarship from the Fitness Institute in his second year, member of several committees in the Department of Athletics and Recreation, chair of the athletics council and winner of a Gordon Cressy Student Leadership Award.

In the fall he is off to McMaster with an entrance scholarship for his master's degree; he will be studying motor learning and motor control in people with developmental disabilities at the School of Human Kinetics. After that he hopes to attend UBC for his doctorate. And after that? Teaching or research.

...THANKS TO ADVICE, SUPPORT

...but all graduates have at least one thing in common —

THOMAS LANE

By KARINA DAHLIN

IN 1990 WHEN THOMAS LANE RETIRED AS CABINET Committee counsel at Queen's Park, he knew exactly where he was going — across the street to U of T to study fine art. "U of T has a bigger art school than many people think," Lane says. "And the campus is beautiful."

Art and nature are just two of Lane's many interests. In addition the 70-year-old Woodsworth graduate is teaching himself to play the piano, he makes pottery, sails and travels — last winter, for example, he spent a month in India — and is an active member of Amnesty International and the United Church. As his rough beard, jeans, sandals and bicycle might suggest, he is also greatly concerned about environmental issues.

A native of Ireland, Lane attended Trinity College Dublin, earning a BA and, in 1951, an LLB. After a year at the University of Cambridge he spent 12 years as an administrator in Her Majesty's Colonial Service in Tanzania. Then he moved to Canada, attended the bar admission course at Osgoode Hall Law School and was recruited by the Ministry of the Attorney-General. As a hobby, while raising three children with his wife, he dabbled in art.

A dabbler no more, he paints large, colourful canvases, most of which portray nature. His work in clay includes a series of hand-painted tiles that offer a modern version of the seven deadly sins such as the race to virtuality and global warming. His most abstract piece so far is a four-by-six-foot collage

of a dozen birch-bark strips, carefully selected and peeled from fallen trees. After soaking the pieces in water for a week, he flattened them, nailed them to a board and added some colour. Conscious of the threat of termites, he then treated the work with a powerful pesticide. It may have been overkill. The odour of the chemical was so strong that he stayed out of his studio for days.

"You learn by trial and error," he chuckles.

Learning is what Lane wanted from U of T and learn he did, thanks to people like painting instructor Sasha Rogers of fine art, "who is a great favourite of everybody," he says. Well prepared, a good critic and a fair marker, Rogers was a constant source of encouragement.

Today's students and teaching staff are much less rigid than his peers and professors were at Trinity College, he observes. "We had a lot who dressed and acted oddly. Here they are more strait-laced." But not boring, he emphasizes, heaping praise upon teacher after teacher.

Spending seven years at U of T was time well spent. Lane's skills as an artist have improved and his understanding of art, deepened. "I try to give my paintings impact, food for thought and feelings," he says. "Most of that I learned at U of T."

KRISTIN SNODDON

By KIM LUXE

WHEN KRISTIN SNODDON DESCRIBES THE PAST FOUR years at U of T as "blood, sweat and tears," she's referring to more than academics. Snoddon, who is deaf, made many friends but also encountered numerous social challenges during her undergraduate education. "There really aren't many other deaf persons here and I was the only deaf person in my

residence," she says. "It was tough."

Despite the obstacles Snoddon, a Victoria College student, excelled academically. This June she will graduate with an honours BA in English, carrying an average of A minus.

It was the reputation of the university's English department that attracted Snoddon to U of T from Beaverton, Ont., a small town north of Toronto. Although she visited a lot of schools before making her decision, she always wanted to attend U of T. "I knew the competition was tough but I also knew the professors were good."

Snoddon, whose deafness was caused by meningitis at the age of 5, can lip-read but says it is impossible to follow a lecture by lip-reading alone. She relied on notes for her — either classmates or interpreters she booked through the office of Special

at this point — definitely working with people. I think I'm two kinds of people — a thinker and a doer — so I'm ready for the doing part. I've had enough thinking for now," she laughs.

TARA LETWINIUK

By CHERY SULLIVAN

TARA LETWINIUK HAD NO IDEA WHEN SHE BEGAN LAW school that the "jungle" awaiting her would be in the rain forests of Guyana, not the offices of Bay Street.

Letwinuk, who graduates with her law degree in June, spent last summer deep in the interior of this South American country, interning with the Canadian Lawyers Association for International Human Rights. Her work took her to the capital city and villages of Guyana and focused on legal issues of the country's indigenous peoples — the Amerindians.

Staying with village families Letwinuk had to contend with army ants "that walk off with anything that lives including rats and cockroaches" to piranhas in the river where she bathed — and that was just on her first trip outside the capital of Georgetown. "I thought, 'Why on earth am I here?'" she laughs. "But it was an incredible experience and I would go back in a minute. The scenery is absolutely breathtaking and it is a completely different way of life."

Growing up in the northern Ontario town of Kenora, Letwinuk is no stranger to the issues of indigenous peoples. Her great-grandmother was Ojibwa and a cousin is head of the Métis association in her home town.

However, it wasn't until her experiences in Guyana that she discovered indigenous peoples issues as a fascinating and developing area of law. "It is an interesting area because it is not set in stone but is still evolving," she says. "Activism for indigenous peoples issues is growing around the world and the possibilities are endless."

The challenges facing Letwinuk in Guyana were almost as endless. Simply finding copies of legislation proved nearly impossible. It took almost a month before she could get her hands on a copy of the constitution. Guyana stopped printing its legislation in the 1970s; the library at the University of the West Indies in Barbados holds many of the country's legal documents.

She continued her research at the University of the West Indies which has a student exchange program with U of T's law school. This program enabled her to receive academic credit for her work. "It's wonderful the law school allows this kind of flexibility," she says.

Eventually she completed a 100-page research paper dealing with Amerindian land issues in Guyana. Political leaders in Guyana and Barbados, Guyana's minister of Amerindian affairs and the dean of the law school at the University of the West Indies have copies of her report and recommendations; the document will be passed on to those drafting changes to the civil rights code in the Caribbean region. Pending funding she has been invited to return to Barbados this summer to continue her work.

In the fall Letwinuk plans to begin her master's of law at U of T. "U of T was my first choice because some of the leading academics in this field are here," she says. "I love the faculty, it is strong, it's diverse and I don't want to give that up to go somewhere else."



Tara Letwinuk:
Lawyer interested in indigenous peoples issues

Thomas Lane:
Artist with a natural flair

Kristin Snoddon:
Deafness doesn't slow down A student

Services to Persons with a Disability. However, the greatest challenge was participating in classroom discussions — English being a program particularly heavy on discussion. "Many instructors and students had never had a deaf student in the class or an interpreter in the room. It was something new to them."

Despite a full course load Snoddon volunteered in other areas to help the hearing impaired. Over the past two years she worked with an outreach group that supports deaf individuals who are HIV positive. She also helped the office of Student Affairs develop a brochure titled *The Deaf University Student: A Guide to Removing Communications Barriers*.

"MANY INSTRUCTORS AND STUDENTS
HAD NEVER HAD A DEAF STUDENT
IN CLASS OR AN INTERPRETER
IN THE ROOM."

— KRISTIN SNODDON

However, the brochure is only a starting point to integration, Snoddon notes. She recommends more education for staff and students in dealing with the hearing impaired on campus and the need for more interpreters trained to work at the university level.

Upon graduation Snoddon will return to her summer job as a housekeeper at Victoria College where the student residences become "hotels" for July and August. In the fall she is considering entering York University's deaf education program where she would like to pursue a teaching career. "That's what I'm leaning towards

FROM TEACHERS, COUNSELLORS

they have enriched U of T and been enriched by its community

PHOTOGRAPHY BY SUZIE KING

TONY MAZZULLI

BY MICHAEL RYNO

IT HAS BEEN A YEAR OF SURPRISES FOR PROFESSOR TONY MAZZULLI of clinical biochemistry. Not only did he win a teaching award from the Association of Part-time Undergraduate Students and the Students' Administrative Council but he did so a scant two years after starting his career at U of T. And adding to this pleasure was his discovery that his second-year microbiology students in pharmacy nominated him, a big surprise considering the course's difficult subject matter.

"The hardest part is taking a subject like microbiology—which can be quite tedious and detailed—and communicating it to students in an interesting way that's relevant to their clinical focus," he says.

Communicating enthusiasm is an area in which Mazzulli excels. "I'm drawn to microbiology because it touches on so many aspects of medicine, the environment and technology. Despite living in a modern world, infectious diseases are still the leading cause of death globally and that fascinates me." He is convinced the majority of his students share his fascination. "There's no question that they read about deadly viruses such as Ebola or HIV and see themselves either finding a cure or having some kind of major impact on society."

Mazzulli, who has some classes of more than 100, is sometimes frustrated by the challenge of teaching large numbers of students. "I'd prefer smaller classes because you get the chance to gauge how they're perceiving what you're trying to teach. It's really nice when at the end of a class students tell me they've learned a lot from my lecture and follow up with some really perceptive questions."

This kind of feedback helps him stay abreast of changes in his field. If he cannot answer a student's probing question he goes to the library or Internet pages to look for an answer. "Just when you think you know everything that's out there, some new disease crops up," he says. Like many in his field, he believes that inappropriate antibiotic use, degradation of the environment and more travel to exotic locales increases the chances of a new virus or malady appearing.

In the classroom Mazzulli finds he must always adapt his lectures to a culturally diverse audience. "You have to make sure that the examples you give make sense to all students, not just those who come from a North American background. I use the question period after lectures to determine whether or not everyone is able to grasp the concepts."

Mazzulli, sounding like a proud parent, says he's often impressed with the sophistication of his students' curiosity. "You can really spot who's going to make a real difference in the future." And when you consider the frightening array of viruses, bacteria and diseases looming on the horizon, this bodes well for all of us.

BEVERLY KAHN

BY JANE STIRLING

IF EVERYTHING THAT YOUNG PEOPLE READ IN THE MEDIA regarding scarce jobs, downsizing and layoffs were true, graduates might feel justifiably depressed. But the job picture, if not exactly rosy, is not as bleak as presented, says Beverly Kahn, manager of counselling services at the Career Centre.

Kahn, who has been a counsellor for 11 years, says the media exaggerate the situation. The Career Centre has seen an increase of about 15 per cent in its employment listings over last year and there are many more unadvertised positions. "Eighty to 90 per cent of the positions that people get are not advertised," she notes.

Media reports also refer to a poor youth employment picture but, in this context, "youth" encompasses high school as well as university students. "University students fare far better than high school students in finding work. The employment statistics don't take into account the educational differences in this group."

The key to finding work is to be prepared and start looking early—preferably before graduation, she says. Students who are searching for a particular job could be on the hunt for six months

positions today are less likely to last a lifetime. Some embrace this and feel comfortable with a part-time, contract blend while others want a more stable environment and look for ongoing permanent jobs."

Successful job seekers take the initiative in developing extra skills like computer literacy, Kahn says. "These days students must be ready to roll when they find work. Employers often can't provide training because they don't have the time or the money." It is also important for students to market themselves—for example, by initiating contact with employers and following up with a phone call.

But the bottom line on jobs and students is a positive one. "There's a whole lot of activity out there so students should be hopeful. When students come to visit me I see they have so much potential, so many capabilities and so many possibilities. The students may not see it themselves but I know somewhere down the road the potential will kick in."



Tony Mazzulli:
Microbiology professor with infectious enthusiasm

Beverly Kahn:
Career counsellor promotes preparation, initiative

Susan McCahan:
Engineering professor connects with students

SUSAN McCAHAN

BY MICHAEL RYNO

EVER SINCE SUSAN McCAHAN was 13 she knew she wanted to be an engineer. "I used to take things apart and try to put them back together. Nobody in my family was an engineer but it just seemed like the right thing for me. I really feel like it was my calling."

Although her calling initially led her into the private sector as a design engineer at GE/RCA, she decided she wanted to teach as well as do research. In 1993 she accepted a position as a professor of mechanical engineering at U of T, a career that she

regards as a "wonderful adventure."

Professor Ian Currie, chair of mechanical and industrial engineering, praises her hard work and "overwhelming enthusiasm." McCahan's popularity with students, he notes, is reflected in her consistently high ratings on year-end student evaluations.

Her classes range in size from 120 students to those with less than 10. "I like small classes because that's where you get the conversation going and you can involve each student individually. But my larger classes are enjoyable too because there are seven different labs and we all get really excited by the material. It's a fun environment to be a part of."

McCahan feels it is important to connect with as many students as possible, a goal she accomplishes by learning students' names. "They're not used to having a professor who can call them by name and it gives them the feeling that I know them personally. Sometimes though I think they're both pleased and terrified that I've gone out of my way to find out who they are," she laughs.

In class McCahan tries to connect theory with practice through her use of props such as car and airplane engines. "There's always a car buff or aircraft enthusiast in every group so after studying somewhat abstract subjects for two or three years it's fun for them to have some examples that they can relate to."

McCahan finds teaching an exhilarating career, particularly instructing those students who show great promise. "You wonder where some of these talented minds are going to end up. You know it will be somewhere fantastic but you don't know where that fantastic place will be."

Students, she chuckles, can still surprise her. "We had one student who was absolutely amazing and after being at the top of the class for four years decided he just didn't want to go into engineering. He was an unemployed actor the last I heard."

to a year.

The Career Centre, whose services are available to graduates up to two years post graduation, is a good place to start. Its resources include seven counsellors who lead résumé clinics, career information seminars and workshops on everything from interview techniques to discovering your skills and options. It also has an extensive resource library of education calendars, employer directories and reference books. Of particular interest to graduating students are two employment services—a listing of jobs for U of T graduates only and summer part-time opportunities.

**"THESE DAYS
STUDENTS MUST BE READY TO ROLL
WHEN THEY FIND WORK."**

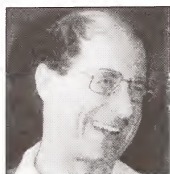
— BEVERLY KAHN

One of the centre's popular resources is a listing of volunteer work, Kahn says. For example, students might apply to become an intern for the TV show Entertainment Tonight or an event organizer for Toronto's First Night celebration. "Volunteering gives students valuable insight into a particular field and lets them develop skills and network. It's also a great way to overcome the catch 22 of job hunting—students need experience to get a job but can't get a job without experience."

Graduates today are far more aware of the challenges they face in finding work than graduates from even a decade ago, she says. Permanent, full-time jobs are not as plentiful as part-time or contract work. "Students today realize and understand that

1997 HONORARY DEGREES

U of T bestows honours on distinguished individuals

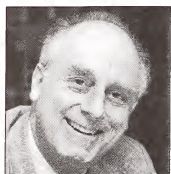


VLADIMIR IGOREVICH ARNOLD

VLADIMIR IGOREVICH ARNOLD, ONE OF THE great mathematical minds of the 20th century, has made outstanding and lasting contributions to both his field and higher education as a whole.

A native of Odessa, Arnold was educated in mathematics at Moscow State University where he earned master's, PhD and doctor of science degrees. While still an undergraduate he solved Hilbert's 13th problem, one of 23 major unsolved problems in mathematics that have tantalized mathematicians since they were proposed early in this century by Hilbert. Arnold taught at the Moscow State University from 1961 until 1986 when he became a professor at the Steklov Mathematics Institute, also in Moscow.

During his career Arnold has contributed to the creation of the Kolmogorov Arnold Moser theory that deals with the kind of non-integrable Hamiltonian systems that govern much of the physical universe. He also developed a major area of mathematical research: the singularity theory in the study of bifurcations of dynamical systems. His proposal of a number of deep conjectures in symplectic geometry and topology has led to major advances in this new field.



VICTOR BROMBERT

PROFESSOR VICTOR BROMBERT OF PRINCETON University has a long and distinguished career in Romance languages and comparative literature in North America and a stellar reputation in France, Italy and other European countries. In the words of Graham Falconer, director of Centre d'Études romantiques Joseph Sablé at St. Michael's College, Brombert "has done more to renew our understanding of 19th-century French literature than anyone else writing in English."

Brombert earned his PhD at Yale University in 1953 and quickly became a major force in North America for the spread and development of interest in French studies. He is renowned for his direction of scores of doctoral students at Yale and Princeton and for his encouragement of younger scholars. During the 1960s and 1970s his contribution to the study of the great French novelists of the 19th century was essential reading for students across the continent.

Brombert is a fellow of both the American Academy of Arts and Sciences and the American Philosophical Society as well as a former president of the Modern Language Association.



CLARICE CHALMERS

ATIRELESS SUPPORTER OF THE UNIVERSITY OF Toronto for the past 15 years, Clarice Chalmers has made major contributions as friend, volunteer and benefactor to this and many other community institutions.

Chalmers has given generously to endow two professorships in the Faculties of Medicine and Music and two endowed chairs in engineering design that honour the interests of her late husband, Wallace G. Chalmers, an alumnus, engineer and inventor who introduced innovations in the area of automotive suspensions and spinal replacement technology. She has also established the seed funding for the Creative Design Research Unit in the Faculty of Applied Science and Engineering, funded three prestigious Wallace G. Chalmers Engineering Design Awards and supported the new residence at Innis College. Her concern for women's issues led to the establishment of the Les Quatorze Award, commemorating the tragic loss of life at the Université de Montréal in December 1989.

She actively volunteers for St. Michael's Hospital and has contributed significantly to the Art Gallery of Ontario.



DAVID CHU

DAVID CHU IS A LEADING PROponent of vigorous, technologically based economic development as a means of widening contacts between China and the rest of the world.

As chair of the Mission Hills Group, a diversified industrial, real estate, communications and leisure activities enterprise, Chu has played a prominent role in the opening and development of the Chinese economy, particularly in the area of high-tech telecommunications. His partnerships with Chinese companies have contributed greatly to the economic stability of the Asia-Pacific region and will continue to play a key role in the prosperity of the region after the resumption of Chinese sovereignty over Hong Kong. Chu's contribution was recognized by his appointment as a member of the selection committee to choose the first chief executive of Hong Kong by the People's Republic of China.

He recently made a substantial gift to the Faculty of Arts and Science in support of studies of the Asia-Pacific region. His generosity, among other things, will create an endowed chair and establish scholarships for U of T undergraduate and graduate students studying in Pacific Rim countries.



PETER LOUGHEED

FORMER ALBERTA PREMIER PETER LOUGHEED has had an outstanding career in public service. His diverse career achievements range from his early days as a running back for the Edmonton Eskimos to successful law and political careers.

A director on 17 corporate boards, Lougheed is one of the most sought-after corporate directors in the country. He represents Canada at home and abroad, holding advisory positions on national and international bodies. Lougheed is co-chair of the Canada-Japan Forum 2000, a bilateral body established to nurture and examine relationships between Canada and Japan including trade, culture and economics.

Lougheed has been at the forefront of issues such as accessibility for persons with disabilities, support for the arts and education. He established the Heritage Fund in Alberta in 1976 and with his wife established the Jeanne and Peter Lougheed Inter-Arts Building at the Banff Centre School of Fine Arts in 1987. The building name recognizes his contributions to Alberta and his belief in education as a measure of quality of life in any society.



ROBERT MACNEIL

ROBERT MACNEIL IS ONE OF CANADA'S MOST successful exports in the field of broadcast journalism. Since 1983 he has been the co-anchor of the MacNeil/Lehrer NewsHour, the American Public Broadcasting System's authoritative news program.

MacNeil was born in Montreal in 1931 but grew up in Halifax, Nova Scotia. After studying at Dalhousie and later Carleton, he left Canada and joined the Reuters news agency in London in 1955. From 1960 on he was a television journalist, notably on foreign assignment for NBC, and later the BBC. By 1971 he had moved to American Public Television, teaming up with Jim Lehrer to co-anchor the network's coverage of the Watergate hearing. He started the 30-minute MacNeil Report in 1975, which by 1983 became the MacNeil/Lehrer NewsHour. After 20 years at PBS, MacNeil recently left the program to pursue other interests including his initial vocation, creative writing.

MacNeil is the author of several works of non-fiction including *Wordstruck*, a memoir of his childhood and the memorable and popular *The Story of English*, published in 1986.



ROBERT MCGAVIN

ROBERT MCGAVIN, FORMER CHAIR OF Governing Council, made the welfare of the university one of his main preoccupations for nine years. Although not an alumnus of U of T, McGavin joined council in 1985 and served on it in a variety of roles until 1993. His direct style and active participation in council's work led to his appointment on a number of committees; in 1989 he was elected chair, a post to which he was re-elected three times.

He devoted an enormous amount of time and energy to the job, both in presiding at meetings and in being available for advice to senior officers and fellow council members. A measure of his success is that he remains a valued resource even after his retirement from council.

McGavin is a senior vice-president, public affairs, at the Toronto-Dominion Bank. Aside from his university work, he has found time for other public activities including serving as trustee of the Toronto Hospital and chair of the Olympic Trust of Canada. Service to the Olympic movement has been a continuing activity for many years.



ANN MEDINA

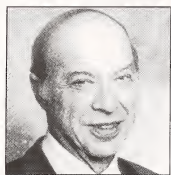
ANN MEDINA'S WIDE-RANGING EXPERIENCE and incisive coverage of foreign affairs have made her one of the world's most highly respected and well-known journalists.

Born in New York, Medina attended Wellesley College before obtaining her master's degree in philosophy from the University of Chicago in 1967. Switching to journalism, she became a producer for NBC News within two years and then a network correspondent and documentary producer for ABC News. She moved to Canada to marry a Canadian and began working for the Canadian Broadcasting Corporation in 1975. Sent to cover the Israeli elections in 1977 she later became a senior foreign correspondent for The Journal and Beirut bureau chief.

Medina has covered the world, reporting on wars, famine and disasters. Currently, while still hosting a documentary program, she has moved into the broader area of communications and technology and lobbied for a greater recognition of the importance of Canadian cultural industries as chair of the Academy of Canadian Cinema and Television and the chair of the Cultural Industries Council of Ontario.

AT THE UNIVERSITY OF TORONTO

in areas of science, scholarship, business, philanthropy, media and culture

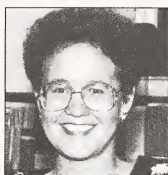


LESLIE DAN

LESLIE DAN, WHO IN 1947 CAME TO CANADA from his native Hungary as a young war refugee, is widely respected as an entrepreneur, humanitarian and philanthropist.

After receiving a bachelor's degree from the University of Toronto's School of Pharmacy in 1954 and an MBA in 1959, Dan started a distribution company called Interpharm and introduced his first product, Calmex sleeping tablets. He founded Novopharm Limited six years later and is now chair and CEO of the Novopharm Group of Companies, one of Canada's largest manufacturers of generic drugs. In 1985 Dan founded the Canadian Medicine Aid Program (CAN-MAP), an organization that provides life-saving medicines and other aid to the sick in the Third World.

In addition Dan supports a wide range of health-oriented initiatives including the Dan Family Chair in Neurosurgery at U of T, the Samuel Lunenfeld Research Institute at Mount Sinai Hospital and Casey House. Dan is a member of the Order of Canada and earlier this year received the Distinguished Business Alumnus Award from U of T's Joseph L. Rotman Faculty of Management.

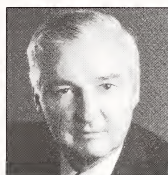


LINDA DARLING-HAMMOND

PROFESSOR LINDA DARLING-HAMMOND IS internationally renowned for her scholarship and leadership in the areas of teacher education and policy.

Darling-Hammond is executive director of the National Commission on Teaching and America's Future and lead author of the major policy report of the commission, *What Matters Most: Teaching for America's Future*, a report expected to dominate the educational policy agenda and educational practice beyond 2000. She is the William F. Russell Professor in the Foundations of Education at Teachers College, Columbia University, co-director of the National Center for Restructuring Education, Schools and Teaching and chair of several influential policy committees including the New York State's Council on Curriculum and Assessment.

A prolific writer, Darling-Hammond is the author of many books and articles on education research and policy and is keenly involved in both policy and applied practice work with schools. She is seen around the world as among a handful of truly outstanding scholars and leaders in the field of education.



PAUL DESMARAIS

PAUL DESMARAIS, A WELL-KNOWN CANADIAN and supporter of higher education, is regarded as one of Canada's most successful international entrepreneurs. Under his Montreal-based Power Corporation of Canada, where he serves as chair of the executive committee, he has assembled a conglomerate of companies. He is also chair of the board and managing director of Pargesa Holding, S.A. (Switzerland) and holds directorships in several North American and European companies.

Over the years Desmarais has been honoured by McGill University and the University of Montreal to name but two, and served as chancellor of Memorial University of Newfoundland for 10 years. He is honorary chair of the Canada-China Business Council, a member of the Privy Council, a companion of the Order of Canada and Officier de l'Ordre national de la Légion d'Honneur (France), among other honours.

He supports the Canadian Institute for Advanced Research and the Canadian University Productivity Awards program. He has also made important contributions to a number of Canadian universities.



GERTRUDE HIMMELFARB

GERTRUDE HIMMELFARB, THROUGH A STEADY Goutpour of books and articles that began in 1952, has done much to establish the relevance of humane letters in the age of industrialism. She is now retired from the City University of New York but not from her distinguished career in scholarship and her support of the treatment of ideas as worthy of respect in themselves, not just signifiers of social, political or economic factors. This commitment to the autonomy of ideas is grounded in her conviction that men and women are independent persons, responsible for their own thoughts and actions and not mere automatons whose lives are determined by impersonal forces beyond their control.

Himmelfarb's publications have enriched our understanding of the work of intellectual giants including Adam Smith, John Stuart Mill, Charles Darwin and Lord Acton. They have also brought to our attention less commanding men and women, particularly in two monumental books on the idea of poverty in 19th-century Britain. And the lucidity of her prose and the clarity of her thinking have helped extend her audience well beyond the bounds of academia.



ARNOLD NAIMARK

DURING HIS 15-YEAR TERM AS PRESIDENT OF the University of Manitoba, Arnold Naimark provided outstanding service to higher education in Canada. His work has received international recognition from the academic community as indicated by his election as president of the Association of Universities and Colleges of Canada and chair of the Association of Commonwealth Universities.

Naimark also has an outstanding academic record as a medical doctor, medical educator and physiologist and is the founding chair of the Canadian Health Services Research Foundation. He is the author and co-author of more than 60 books and papers in physiology and medicine and is a frequent consultant and speaker on health care, higher education and medical research issues.

Recognition for his work has come from many sectors and includes his election to the Royal Society of Canada, several honorary degrees, medals and prizes as well as his service on numerous professional advisory committees. His fine sense of humour was recently acknowledged with an invitation to deliver the annual Stephen Leacock Memorial Lecture at McGill University.



MARTIN REES

SIR MARTIN REES HAS PROBABLY BEEN THE most influential single figure in European theoretical astrophysics in the past two decades. He has contributed to our understanding of almost every object in astrophysics: black holes, cosmic rays, globular clusters, quasars, pulsars, radio galaxies, stellar X-ray sources and white dwarfs. His contributions include large parts of our accepted model for the formation of galaxies, the recognition that tidal capture is the dominant formation mechanism for binary stars in dense stellar systems and much of our current understanding of quasars and active galactic nuclei.

He led the development of the Institute of Astronomy at Cambridge as its director for 10 years and shepherded the movement of the Royal Greenwich Observatory to the institute's site. This created one of the most important centres of astrophysical research in Europe.

Rees has strong ties to the Canadian Institute for Theoretical Astrophysics (CITA) at the University of Toronto. He was a PhD supervisor to two of the institute's faculty members and two more held post-doctoral fellowships with him.

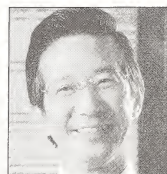


SUSAN RUBES

SUSAN RUBES IS ONE OF THE MOST INNOVATIVE leaders in the Canadian entertainment industry. An actor, a founder of the Young Peoples Theatre and a guiding force in the creation of the Family Channel, she has been a prominent member of the arts community since she emigrated from Austria in 1938.

In the 1950s Rubes pursued her acting career in the United States. Dismayed by the quality of good theatre for children there, she and her friends thought of ways to offer first-rate plays for younger audiences. The topic continued to occupy her after her return to Canada in 1959 and in 1964 she launched the Young Peoples Theatre, an initiative that would arrange school tours for acting companies. Ten years later she spotted an empty building on Front Street East in Toronto that had belonged to the Toronto Transit Commission and obtained it as a permanent home for YPT.

In 1980 Rubes resigned from YPT to become head of CBC Radio drama where she stayed for seven years. In 1987 she laid the groundwork for the introduction of the Family Channel and served as its president for two years.



PHILIP YEO

PHILIP YEO, CHAIR OF THE SINGAPORE Economic Development Board and group chair of Sembawang Corporation Ltd., is a successful international businessman dedicated to the public service of Singapore.

As chair of the economic board Yeo has provided dynamic leadership in Singapore's drive to become an "intelligent island," oriented to high technology, high quality manufacturing and service industries. He has a long history of public service, joining the Singapore administrative service in 1970 and holding many appointments including permanent secretary in the Ministry of Defence. Yeo was also first chair of the National Computer Board from 1981 to 1987. As group chair of Sembawang Corporation Ltd., Yeo heads a group of companies with total annual sales of approximately \$1 billion.

A graduate of U of T's Faculty of Applied Science and Engineering in industrial engineering, Yeo continues to support the faculty. He personally selects the Sembawang Scholars who attend U of T and other leading engineering schools in North America.

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Quote by Alan Thomas Illustration by Stephanie Power



Introducing the New Institution

Michael Fullan
Dean of OISE/UT

The new OISE/UT brings together faculty, staff, and students from two former institutions (the Ontario Institute for Studies in Education and the Faculty of Education, University of Toronto) to form a single integrated Faculty of Education within the University of Toronto — a faculty which enjoys strong support from the President, Provost, and University colleagues. The purpose of OISE/UT is to pursue the goal of establishing a learning society, through immersing itself in the world

of applied problem solving and expanding the knowledge and capacities of individuals to lead productive lives. OISE/UT will do this in several ways. First, we will pursue this goal through the education of educators. Starting with initial teacher education, we are strengthening our partnerships with schools in order to produce future teachers capable of facing the complexities of the classroom and of learning continuously on the job. In addition, through a host of graduate and continuing education programs, we are developing educators in a wide range of leadership roles including: adult educators, specialists in educational systems, administrators in schools and in postsecondary institutions, community developers, and doctoral students who will become the profes-

soriate of faculties of education of the future. Second, through research and field-based problem solving, we will continually expand the knowledge base about education, as seen, for example, in the areas of work featured in this publication — lifelong learning, literacy from early childhood to adulthood, technology, and knowledge about managing change. Research on educational matters is growing substantially at OISE/UT as established and new professors develop systematic research and field development programs. Third, OISE/UT's work is firmly grounded in policy and practice. Public education will be served much better if policy and practice are informed by critical debate. As well as working collaboratively with policy makers and practitioners to

solve problems, we will continue to establish forums and foster critical discussions about present and future policy directions in Ontario and in the country. There is a dearth of opportunities for professionals and for the public to engage in informed critique of and dialogue about educational policy matters. We plan to play a major role in addressing this crucial need. These three aspects — the education of educators, the knowledge base, and work in policy and practice — together create a synergy of educational development. In a professional school, like education, professors and researchers must develop connections across these three components as they carry out their work. In this first year of creating the new institution, we consider ourselves especially privileged as we are posi-

tioned to help make education a central player in the University of Toronto, and to deepen our partnerships throughout the province, indeed throughout the world. The new financial realities in Ontario make it all the more important that at this stage we mobilize alternative resources and energies. As with other faculties, we are launching a development campaign to raise additional resources to support program innovation, new faculty chairs, technology and student support. While there are many difficulties in educational systems throughout the world, I think, somewhat paradoxically, that we are at a new take-off period for education. OISE/UT is ready to join forces with other partners to push the limits of what can be done, thereby creating a new and better educational future.

International & National

OISE/UT is one of the most internationalized faculties within the University, not only in terms of collaborative research projects with institutions and organizations across the world, but also in terms of the steady two-way movement of students and visiting scholars. The prominence of OISE/UT faculty in the international educational community is another indication of our global presence and outreach. Associate Dean Ruth Hayhoe, for example, is the first non-American to be appointed to the Board on International Comparative Studies in Education of the National Academy of Sciences which advises the American government on international issues and educational policy and OISE/UT professor David Wilson is the President of the World Council on Comparative Education.

Below are some of the current projects and programs which connect OISE/UT to the world community of education.

Research Network for New Approaches to Lifelong Learning
A network of researchers in 20 Canadian universities and community colleges and representatives from 16 com-

munity groups and corporations studying the relationship between informal learning and formal education. OISE/UT sociologist David Livingstone is leading this network funded by the Social Sciences and Humanities Research Council of Canada.

Women and Minorities as Educational Change Agents
A university linkage program building on the success of the Canada-China joint doctoral program involving OISE/UT and seven Chinese universities, and drawing on the experience and expertise of some of the same central players in both countries. The focus of this five-year project (it runs until 2001) is professional development for women and minority teachers, at all levels of education, that will enable them to become dynamic agents of social change. The principal investigators are Ruth Hayhoe and Dwight Boyd.

Distinguished Visitor in Women and Development
An annual position, starting in 1997, named after international adult educator and activist Dame Nita Barrow and located in OISE/UT's Centre for Women's Studies in Education. The Distinguished Visitor will be selected from applications and nominations of women in the developing world who

have research and activist experience in women's issues in development and community transformation. The position is sponsored by OISE/UT's adult education program and by several internal research centres with an interest in global issues and development.

Aga Khan Project
A project to establish the Institute of Educational Development (IED) at the Aga Khan University — an innovative venture in planned educational change whose mandate is to support the improvement of schools, educational systems, and policy reform through research and program services. The three partners in this international project are OISE/UT, Oxford University, and the Aga Khan University in Karachi. Dennis Thiesen coordinates the OISE/UT involvement.

Escuela Nueva (New School)
A highly innovative and successful alternative primary school program for poor children, now operating in 30,000



Education, broadly conceived, will be one of the central disciplines of the next century. As a Faculty and as a field of study, Education has not historically enjoyed a central place in the work of the leading research universities in the world, including the University of Toronto. Neither the discipline nor the universities have been well served by the relatively weak role assigned to faculties of education. At the University of Toronto, we are determined to elevate the importance of Education and move it to the centre of the University's academic and intellectual preoccupations. It was for this reason that the

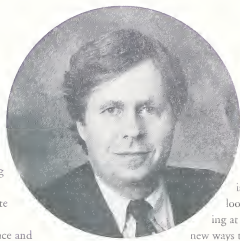
University of Toronto sought and embraced the merger of its Faculty of Education and OISE. The goal of the merger is to make the discipline of Education a core priority of the University, where Education can thrive in its own right as an applied professional school with strong ties to the field of policy and practice, and can draw strength from the full range of resources of a major research university.

Cycles of Learning contains many examples of programs where OISE/UT is showing leadership in the conception and study of education throughout the life course — from early childhood programs to later-in-life

learning. It also highlights areas where the combined faculty and staff of OISE/UT have a proven track record of excellence — in the study of literacy acquisition and development, in the generation of innovative educational technologies, and in policy reform and implementation. These rich cross-disciplinary traditions of educational research and innovation foster a lively community of learning for aspiring teachers and students of education.

Two other exciting initiatives — The Institute for Human Development, Life Course, and Aging and The Knowledge Media Design Institute —

show the potential of cross-disciplinary research to contribute to improving education systems and the quality of life. The Institute for Human Development is drawing on the experience and expertise of child educators, human development psychologists, cognitive scientists, gerontologists, and economists to build an understanding of human growth, education, and development in today's society. Continuing Marshall McLuhan's ground-breaking work in culture, technology, and society, The Knowledge Media Design Institute



Robert S. Prichard
President of the University of Toronto

is looking at new ways to construct and disseminate knowledge and to link technology to innovative educational processes.

OISE/UT should go from strength to strength as the academic benefits of the merger begin to accrue, and as it becomes clearly established as one of the world's finest centres for the pursuit of the discipline of Education. It is a mission worthy of all of us.

Outreach



Colombian schools and in 10 other Latin American nations. In operation for over a decade, OISE/UT faculty continue to assist in the development and implementation of Escuelas Nuevas programs. This project has various funding sources. The contact person is Joseph Farrell.

Egypt Community Schools Project

An innovative "action learning" project which is successfully providing primary schooling to very poor rural girls in Egypt. The OISE/UT team is assisting in the development and spread of this program to approximately 8,000 schools. UNICEF and CIDA are funding this project, and the OISE/UT contact person is Michael Connelly.

Middle East Curriculum Reform Project

A project to reform curriculum in Grades 1 through 10 undertaken by OISE/UT's International Institute for Global Education. Working with ministries of education in Algeria, Jordan, Lebanon, the Palestinian Authority, and Syria, and under the auspices of

UNICEF, the Institute's Co-Directors Graham Pike and David Selby look forward to extending the project to other countries in the Middle East and North Africa.

Malaysian Leadership Training Project

An intensive leadership program designed by OISE/UT faculty and funded by the Ministry of Education of Malaysia for senior officials. Malaysian educators spend three to five weeks in sessions at OISE/UT and at a cooperating local board of education. The contacts are Paul Begley and Ed Hickox.

Overseas Additional Qualifications Courses

A continuing education program in Primary and Junior Education operated by OISE/UT in conjunction with ministries and local faculties of education in Great Britain, New Zealand, Europe, and Asia. The course foci range from curriculum topics to system level issues such as school cultures and integration of education programs and the community. The OISE/UT contact is Gary Hunt.

Urban Network to Improve Teacher Education (UNITE)

A network of nine schools and colleges of education in Canada and the United States dedicated to working with teachers

in urban schools and with youngsters who live in conditions characterized by poverty. Dennis Thiessen coordinates the OISE/UT involvement.

American National Education Association Project

An evaluation of the U.S. Learning Laboratories Project conducted by a team of OISE/UT researchers. Under the auspices of the National Education Association, the Learning Laboratories are school/school board/teacher union/and business partnerships aimed at school level growth and development. The principal investigators are Nina Basica, Suzanne Stieglbauer, and Michael Fullan.

Telelearning Research Network

A federally funded Centre of Excellence initiative linking 100 researchers, educators, and leaders in the business community in the study of new multi-media approaches to teaching and learning. OISE/UT cognitive scientists Carl Bereiter and Marlene Scardamalia and human development specialist Daniel Keating are strategically involved in the design, field testing, and analysis of telelearning initiatives.

Life Long Learning and

OISE/UT is strongly committed to exploring lifelong learning, a popular phrase with critical significance for the future. It means to understand how our knowledge about ourselves and our world develops over time — from early childhood to mature adulthood — in various settings, at home, at work, and at school.

OISE/UT's innovative work in understanding child and human development, and relating that understanding to effective school programs, is internationally recognized. OISE/UT is also a pioneer in developing continuing education programs for adults.

The Centre for Teacher Development is a unique Canadian organization committed to exploring the career-long learning of teachers and to offering them opportunities to reflect on their teaching practice. Other OISE/UT programs, such as the Master's for Health Professionals, encourage doctors, nurses, and others to reflect on how they develop their knowledge and skills and on how they transmit their experienced knowledge to their clients and to their students.

OISE/UT's exploration of learning in the workplace is illustrated by the research on Prior Learning Assessment and Recognition which honours the principle of lifelong learning by translating it into academic credit. The Workplace and Change program seeks to understand the nature of workplace learning as it occurs in organizational settings, and it does so through a comprehensive graduate program.

At OISE/UT we seek to provide a place where lifelong learning can prosper. It is our dedication to this principle that is the foundation of all our academic programs.



Institute of Child Study

New understanding of children and their social and educational worlds is being built at the Institute of Child Study (ICS). The work of ICS in linking research about children to elementary education programs and teacher education is further supported by the recent establishment of the Dr. R.G.N. Laidlaw Research Centre and the new elementary teacher education program leading to the Master's in Child Study and Education.

The ICS approach is based on the premise that examining how children understand the world around them is crucial to designing effective education and societal care. One area of application is the legal system: how do children understand and experience it? An ICS study recently examined children's and parents' understanding and experiences of supervised access programs in cases of custody dispute. Other studies at ICS have examined children's understanding of legal rights and the Young Offenders Act and findings have been reported to federal policy workers. Related work

on the UN Convention on Children's Rights in Central and South American countries is being carried out in collaboration between Puelblit Canada and ICS staff.

In a second area of interest, on children's understanding in the educational system, ground breaking theory and research is being conducted by Robbie Case and Janet Astington. Case's research includes collaboration with ICS Laboratory School teachers on new ways of developing children's mathematical intuitions. Astington's work shows how children become aware of their own minds and understanding, as well as the minds of others. This knowledge may be an important part of children's early grasp of the learning process and of their ability to get along with others.

Additional work on science and technology instruction is getting under way with collaboration among teachers, academics, and others from OISE/UT's Centre for Applied Cognitive Science and the Knowledge Media Design Institute.

Structures Mathematics Program for Primary Grades

Lifelong Learning in the Learning Society

As we approach the 21st century, it is clear that rapid technological innovation is causing fundamental changes in both the society and the economy. Marshalling the best intellectual resources to understand the nature of these challenges, and coordinating those resources toward effective action, will be major factors in Canada's ability to respond successfully to these unprecedented challenges.

Education must play a key role in this transformation, and will need to transform itself to contribute effectively. OISE/UT is involved in several major initiatives to understand and to influence this transformation. A key first step is to generate a coherent framework for understanding these complex changes, a major goal of the Human Development Program of the Canadian Institute for Advanced Research, a Canadian-based international network of scientists and scholars. Professor Daniel Keating directs this program, and Professors Robbie Case and Marlene Scardamalia are key members of the research team.

Addressing these complex issues can only be achieved through interdisciplinary linkages which allow us to find the important connections among individual development, population well-being, and societal functioning. OISE/UT plays a key role in two new University of Toronto Institutes which will foster such inquiry — the Institute for Human Development, Life Course, and Aging, which will focus on the nature of human development across the life course and the Knowledge Media Design Institute (KMDI) which will design new media supporting human development and education.

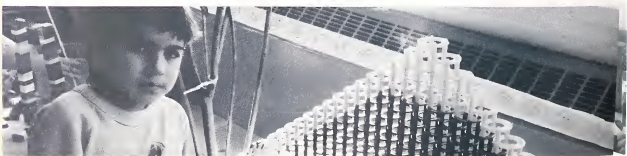
Professors Bereiter, Keating, and Scardamalia are actively involved in KMDI, in conjunction with their leadership roles in the federally-funded Telelearning Network of Centres of Excellence. Through national and international networks such as these, supporting collaboration within and beyond the institution, OISE/UT is poised to play a pivotal role in meeting these major challenges.

Developed by child psychologist Otto Weininger, the Structures program is presently taught in about 2,000 primary classrooms around the world. The program is based on the premise that children, under appropriate adult monitoring and guidance, learn through play. The child constructs towers, pyramids, circular buildings on tabletops, and playglass platforms. He/she plans, experiments, revises, and formulates strategies to develop the constructions. First, each child constructs alone and takes ownership of his/her learning. Later, bridging to another child's structure is made possible by thinking together about

how the

bridge will occur.

The teacher helps the children describe their structures by using math terms, and then extends their math thinking by exploring the math functions contained in their structures. When, for example, a six-year-old counts the arms on the spiders he has constructed and says "multiplication is just like being able to add fast," he has gained an experiential grasp of these math concepts. And by linking math understanding and math function, children make it "their own" — a permanent, integral part of themselves which enables them to think about, talk about, and enjoy math.



Development

Centre for Teacher Development

The history of educational reform is filled with innovative curriculum programs and policies, administrative re-organization plans, and educational finance plans. Yet, in the final analysis, it is the teacher who makes the difference. Everything else is support for teaching/learning situations.

Recognizing the pivotal, often overlooked, place of the teacher, the Centre for Teacher Development at OISE/UT adopts the view

that the teacher's knowledge and action are at the heart of quality education and school improvement. The Centre supports a full array of graduate programs in teacher education and development and supports innovative preservice teacher education through the work of its faculty and graduate students. The research and teaching programs of the Centre emphasize lifelong career development in

studies of narrative history and story telling, literacy, women in education, comparative, international approaches to teacher education, multiculturalism, supervision, teacher reflection, and induction to the profession.

In addition to its research and teaching program, the Centre edits *Curriculum Inquiry*, Canada's top education journal, and publishes in cooperation with the Centre for Research for

Teacher Education and Development, University of Alberta, *Among Teachers*, an inquiry-oriented publication, written by and for teachers.

The Centre, established under the direction of Professor Michael Connelly in 1989 to link preservice and graduate programs in teacher development, was an early model for OISE/UT, drawing its faculty from the Faculty of Education and OISE.

Experience Counts...for Credit!

Adult Canadians of earlier centuries were no strangers to lifelong learning. As pioneers and immigrants, often both, they learned all their lives long simply to survive. What they distrusted was "education," otherwise known as "book-learning." On the other side, though educators might give lip service to the motto, "We learn by experience," they have certainly not honoured life experience by awarding it academic credit — that is, until recently.

What has changed all this is a movement to legitimize the value of what has been learned from life experience by defining it more carefully and clarifying its equivalence to what is learned in academic courses. This movement, called "Prior Learning Assessment and Recognition" (PLAR), aims to provide a legitimate basis for translating the learning that emerges from life experience into academic credit.

Alan Thomas and other adult educators at OISE/UT

have been at the forefront of this movement. Thomas directed the first national survey on PLAR and found that it was being applied in almost every province at every level of education, in school boards, colleges, and universities. Since that time, most provinces have introduced student PLAR evaluations.

Although the PLAR approach is relatively new, it is being used in many countries throughout the world. PLAR has been introduced into the community colleges in Ontario systematically over the past five years, thus opening doors to thousands of students who had formerly been considered ineligible for continuing formal education.

This work not only provides a liberating legitimacy for identifying and releasing untapped human resources but it also sets the foundation for a better understanding of the extent and character of lifelong learning.



Illustration by Celeste Kim

Master's Program for Health Professionals

Every year, many health professionals acquire a role, that of educator, which is quite different from the one they have been prepared for. A physician may become responsible for supervising a practicum, a nurse may be assigned to evaluate a new program, or a physiotherapist may become the dean of a school. In response to this situation, OISE/UT has collaborated with the University of Toronto's Centre for Studies in Medical Education in developing a Master's program for Health

Professionals. The program has already graduated more than 100 health professionals, some of whom have continued on to pursue doctoral degrees, and OISE/UT now operates similar programs with McMaster University and the University of Ottawa.

The program is unique in Canada. Its distinctive features are: (1) it is not limited to physicians, but attracts a wide variety of health professionals; and (2) it aims to provide an understanding of educational principles in contrast to specific how-to courses

which are a major component in most other programs. Another feature of the program is its flexibility. As one of our physician graduates remarked, "The flexibility in courses and course times makes the program acceptable to busy professionals and sends out the message that this is a program for mature adult learners."

Because of the success of the Master's program for Health Professionals, OISE/UT is considering how to extend this program to other professions such as engineering and law.

Workplace Learning and Change

This OISE/UT specialization in adult education attracts, each year, four times as many applicants for all degree programs as it can accommodate. Students are drawn from the public, private, and not-for-profit sectors, and represent such diverse organizations as IBM, Ontario boards of education, Pepsi Cola, Sheridan College, and the Department of National Defence.

The program engages students in research and practice which reflect the leading edge of organization change and adult education theory. Students explore two complementary themes: (1) the workplace within a broad social framework or global context; and (2) models of organization which reduce workplace inequities while increasing

effectiveness. These alternative models attempt to achieve: greater equality and inclusivity; broader participation in decision-making; more reflective, responsive, and respectful work environments; a better informed workforce; a higher quality of working life; and more sustainable forms of production.

Workplace Learning and Change is an adaptation of the former DHR program which has been in operation for 20 years. This program distinguished itself both by attracting some of the field's most experienced and competent professionals, and by having graduated over 100 doctoral students, over 300 Master's students, and dozens of certificate and diploma students. The program enjoys a reputation as the only program of its kind in Canada.



Language Acquisition and

OISE/UT has attracted a concentration of internationally known researchers and leading practitioners in the field of literacy, and this group has become a magnet to literacy scholars from around the world. Research encompasses a broad range of theoretical and practical issues, with emphases in the areas of literacy acquisition from preschool to adulthood, causes and intervention strategies for reading and writing disabilities, and second and third language literacy, including pivotal studies in French and heritage language teaching and learning. Our knowledge about literacy continues to grow from this research base as well as from working with exemplary teachers in our practicum, inservice, and graduate programs.

We have learned a phenomenal amount about how children develop power with language, from how they learn to talk to how they develop as readers and

writers. At OISE/UT we are committed to translating this knowledge base into classroom practice. We now have available a body of books, journals, and research documents that provides a background for shaping an effective literacy curriculum. We know, for example, the importance of establishing links between the home and school and of creating a balance between more traditional approaches to language learning and newer whole language approaches. We have also reviewed the teaching of writing and have restructured our understanding of the writing process.

Both new and experienced educators look to OISE/UT to extend their understanding and improve their teaching practices. Many register in the graduate school to obtain advanced degrees, but thousands of others profit from the OISE/UT expertise in the field of literacy through inservice teacher education.

Reading Recovery

The partnership between OISE/UT and the Canadian Institute for Reading Recovery connects children at risk in literacy development to educators and researchers committed to understanding the process of reading and writing in young children. The Reading Recovery program is designed for Grade 1 children who are finding the transition into literacy learning troublesome.

As an early intervention program, Reading Recovery allows children time to engage in the school system and provides help before the gap in achievement becomes too great. After one year of school, the lowest achievers in a class enter the program for a period of 12 to 20 weeks. The Reading Recovery program is designed to reduce literacy failure across an education system, though the proportion of children helped

depends on the resources an education system is prepared to allocate.

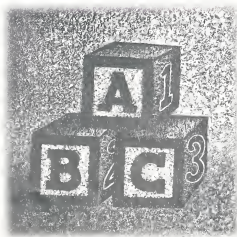
The success of Reading Recovery depends, of course, on both the quality and the intensity of the implementation process. Ongoing professional development is a critical part of any implementation plan, and trained Reading Recovery teachers attend six to eight continuing contact sessions throughout the years following the training year. OISE/UT plays a key

role in this part of the program. As well, a number of Reading Recovery teachers have enrolled in the graduate programs at OISE/UT, and staff of both organizations are in the process of sharing the results of their research programs.

The Reading Recovery program, which is internationally acknowledged for the role it can play in early literacy learning, is supported by the Ontario Ministry of Education and Training.



Children's Conceptions of Language, Mind and Knowledge



For two decades, David Olson has been heading a research program which examines the relations between language and cognition, and in particular, the cognitive implications of children's learning to read and write, on their conceptions of language, of mind, and of knowledge. The basic assumption is that writing, as a permanent, visible artifact, turns language into something we can think about — a process that not only changes our conception of speech, but of mind and knowledge as well. Through experiments with children who are in the process of learning to read and write, David Olson and Nancy Torrance have succeeded in showing that an understanding of such basic concepts as *what is said* and *what is meant*, verbatim repetition, and literal meaning, are to a large

extent products of literacy. Schooling is seen as the primary means for the child's enculturation into the literate world, although the home literacy experiences of pre-school children are also key determinants in this process.

This work, which has long been supported by the Social Sciences and Humanities Research Council of Canada and the Spencer Foundation, has resulted in over 100 research papers and a dozen authored or edited books including *The Handbook of Education and Human Development* and *The World on Paper*. His work has earned Professor Olson a fellowship in the Royal Society of Canada, and honorary doctorates from the University of Gothenburg in Sweden and the University of Saskatchewan, and the Canada Education Association's Whirworth Prize.

Literacy Development

Specialist Courses for Teachers

Twenty years ago, Arn Bowers organized and began teaching the three-part Additional Qualifications specialist courses in the teaching of reading, both during summer and winter evening sessions. Over the years, thousands of teachers have participated in these classes and workshops, exploring current literacy issues and practices, supported by research and curriculum design, and incorporating the principles of language acquisition and literacy development. These courses lead towards the Specialist Certificate in Reading for elementary and secondary teachers in Ontario, and focus on classroom instructional strategies and indicators for promoting and assessing student growth and development.

Through preparing and presenting

seminars and action research projects for their colleagues in these courses, teachers have opportunities for developing leadership responsibilities in literacy education. As Arn Bowers points out, many enrolled in the reading program act as associate teachers for new teacher candidates in the B.Ed. Program, and the knowledge and strategies they acquire in their courses can then be applied in their classrooms, extending and enriching the reading and writing opportunities for both the students and the teacher/candidates. Additional Qualifications courses strengthen the University's partnership with school boards and with teachers, blending theory and practice in a framework for teacher development, promoting literacy understanding throughout a teaching career.



Teaching Literacy

Many teachers have changed their view of literacy teaching, and with the support of a network of colleagues and the encouragement of a caring and enlightened administration, are examining their own practice as teachers of reading and writing, taking responsibility for their own professional growth. The classroom is one of the best sites for research into teaching, and the teacher can be at the centre of the research team. Conscious reflection about their own teaching practices often leads teachers to identify thin spots or even gaps in their programs.

Over the last few years Dale Willows has provided

hundreds of workshops to assist educators in improving their teaching practices for students of varying backgrounds and abilities. These workshops have had a direct impact on the literacy policies of major school boards, on the classroom practices of hundreds of teachers, and on the reading and writing achievements of thousands of children. Workshops are often followed by conferences and write-ups in professional journals and in the news media, both in Canada and abroad. In this way the work of OISE/UT has a wide impact on the teaching practices of thousands of educators.

L'intervention précoce en lecture dans le contexte minoritaire franco-ontarien

Les premières années d'études représentent le moment privilégié pour la prévention de l'analphabétisme. Malgré l'émergence de plusieurs approches, l'intervention précoce en lecture demeure une pré-occupation majeure dans les milieux minoritaires. En effet, la clientèle des écoles de langue française de l'Ontario est diversifiée sur le plan linguistique. L'école doit relever plusieurs défis et composer avec les élèves qui parlent peu ou pas le français avec ceux qui maîtrisent un français vernaculaire et avec ceux provenant d'un autre milieu socioculturel. Certains élèves, avant de s'intégrer au programme d'études ordinaire, doivent apprendre ou perfectionner leur français ou se familiariser avec leur nouveau milieu socioculturel.

Parmi les divers modèles d'intervention en lecture existants, le modèle socio-constructiviste retient notre attention. Il stipule que l'apprentissage se construit en interaction avec l'environnement et selon un processus autogéré de résolution de conflits intérieurs qui surgissent lors d'expériences concrètes, de discours coopéra-

tifs, de réflexions personnelles.

L'enseignement et l'apprentissage sont des activités indissociables et complémentaires.

L'enseignante ou l'enseignant différencie son intervention et rend l'apprentissage significatif en élaborant des activités à partir des expériences et du bagage linguistique de l'élève à risque. L'élève doit comprendre le pourquoi de l'activité et les problèmes qui en sont à l'origine. Il ou elle peut s'approprier les outils qui l'aideront dans sa démarche d'apprentissage de la lecture ainsi que les concepts qui les sous-tendent. L'élève reçoit ensuite les savoirs institutionnalisés, qui sont soit des connaissances soit des stratégies. Ce processus d'acculturation permet à l'élève d'adopter un comportement de lecteur-lectrice compétent(e).

Connecting Consequences of Literacy

In our schools there is a strong emphasis on a problem-solving, inquiry orientation to learning. Instead of treating the mastery of basic skills and the acquisition of particular bodies of knowledge as ends in themselves, this means we need to think of both skills and knowledge as means for effective action, as a repertoire of tools. Gordon Wells is a member of a group of educational practitioners and university-based researchers who are committed to fostering this approach to education, through their emphasis on inquiry as a key mode of learning and teaching at all levels in education. A major focus of their work is literacy development.

As an action research community with shared values and purposes, their aim is to foster the collaborative construction of knowledge and the development of understanding about

topics that are both individually and socially significant. Supported in part by a grant from the Spencer Foundation, this group, Developing Inquiring Communities in Education (DICEP), has strong ties with OISE/UT where some members teach or pursue graduate studies. They cover a wide range of educational interests at all levels, including language acquisition and literacy development, and consider themselves both teachers and learners. Some have been working together for many years, some have joined this community more recently, and DICEP is looking forward to welcoming new members in the future. They meet as a group on a monthly basis to share inquiries, collaborate on publications and conference presentations, and maintain strong connections through their e-mail network.

Change

International Centre for Educational Change

Dean Fullan has long been a noted figure in policy, implementation and change theory, and he is instrumental in OISE/UT's ongoing commitment to the development of educational policy and implementation strategies aimed at the improvement of education systems both in Ontario and abroad. The newly created Centre for Educational Change, under the direction of Andy Hargreaves, reflects this commitment.

The Centre brings together faculty at OISE/UT who have a common interest in understanding and facilitating educational change and represents some of the most advanced thinking about educational change in the world.

Faculty associated with the Centre include (as well as Dean Fullan) experts in assessment and evaluation (Lorna Earl), teacher organizations (Nina Bascia), and secondary school restructuring (Lynne Hannay). The Director,

Andy Hargreaves, is perhaps best known for his studies of how teachers cope with and commit to educational change and of the levels of education best suited to adolescents. This research has been fundamental in Ontario's own efforts to restructure secondary schools. Hargreaves is also a significant voice in Ontario's restructuring of teacher education and professional development. Some recent and ongoing projects of the Centre are: (1) facilitating and evaluating major programs of school improvement in Ontario and Ohio; (2) evaluating change initiatives undertaken by the American National Education Association, the National Center in the U.S., for Restructuring Education, Schools, and Teaching, and the Ontario Ministry of Education and Training; and (3) undertaking programs of action research with Ontario schools — research designed to improve schools from within.

Transformational Leadership, Learning, and Change

For the past half dozen years, Kenneth Leithwood, Doris Jantzi, Rosanne Steinbach, and their colleagues in the Centre for Leadership Development have been conducting a series of studies aimed at better understanding forms of leadership that are productive for educational organizations in the process of restructuring. Their research has increasingly pointed to the importance of teacher commitment, and both individual and organizational learning, in accounting for variation in the success of schools' efforts to accomplish restructuring.

Leithwood and his colleagues have explored the antecedents of teacher commitment and the relationship between teacher commitment and organizational learning, and in the process have

developed a better understanding of the nature of organizational learning in schools. They have also analyzed and described the conditions which foster organizational learning and which inhibit it. This research has led them to develop a "transformational model of leadership" adapted to the unique contexts of school organizations. They have collected detailed descriptions of such leadership and they have also inquired about the contribution of such leadership to teacher commitment, organizational learning, the amelioration of teacher stress and burnout, school culture, and other factors

influencing the success of school restructuring. This research has examined the effects of leadership and organizational learning on such student outcomes as math and language achievement, student participation and engagement in schools.

A substantial focus of the Centre's research has concerned those problem-solving and other "internal" processes giving rise to transformational leadership practices.

As the adage says, "There is nothing constant but change." Change in its various forms has been an important focus area for OISE/UT.

Our faculty has contributed ground-breaking research to the study of change in

educational institutions and curriculum programs, to the development of

changing roles for principals, students, teachers, and teacher unions, and

to the conception and implementation of strategies to address

gender, race, and other kinds of equity issues in schools. This work

embraces the study of change as it relates both to the development

of new policies and implementation strategies and to the critical

reassessment of social and educational systems from a social justice

point of view.

OISE/UT sponsors research centres for the evolution of policy

and procedures related to change in local and international

contexts. Three of these centres are highlighted here. The

International Centre for Educational Change focuses on

international connections related to improving schooling

around the world, from Canada to the United States to

Australia to Pakistan. The Centre for Leadership Development

addresses the role of administration and what school leaders

need to know to move forward in a changing context. The

Centre for Women's Studies in Education addresses educational

and other issues related to gender, race, ethnicity, physical ability/

disability, and class. The research of individual professors and

researchers also considers the evolving context of change for a variety

of groups — for immigrants and students of minority back-

grounds, for stakeholders in the education system, from parent groups

to teacher unions, and for ministries of education and state departments.

All of these efforts are responsive to the interests and needs of the students

and teachers in education: and all are intended to enlighten, improve, and

share information to make education more relevant to the students of

today and tomorrow.

Gender Equity
and Schools

Feminist faculty and research staff at OISE/UT are involved in creating gender equitable curriculum materials and working with teachers to promote the achievement and healthy development of girls in schools and the community. Since 1983, these efforts have been coordinated through the Centre for Women's Studies in Education (CWSE). The continuing need for work in this area is amply demonstrated in a recently completed study by the Centre for Women's Studies which looks at how schools are working for girls and young women, *Girls and Schooling: Their Own Critique*.

Through focus groups held in a variety of schools in different parts of Ontario, female students from age 12 to 20 spoke about their experiences of sexual harassment and of being "undervalued" in the classroom and "unrepresented" in the curriculum. These findings have led to two new initiatives within CWSE.

The first is a two-year study designed to raise student-teacher awareness of gender issues in education and to identify strategies that will promote discussion of and knowledge about gender equitable teaching and learning practices within preservice

education programs. Again, focus group methodology is being used, this time with student teachers and faculty members in faculties of education across Canada. In focussed discussions of the problems, successes, and possibilities for making changes, group members highlight their own experience and knowledge which can be used to redesign professional education for gender equitable schooling. The second initiative is a new M.Ed. specialization in gender equity and education. This specialization will admit students in September 1997 and will have a strong orientation towards the classroom and the profession of teaching. While students will be registered in an OISE/UT departmental program, the specialization will be coordinated through the Centre for Women's Studies in Education where students will have access to a rich collection of relevant resources and can interact with knowledgeable faculty and researchers.

The Changing Face of Teachers' Federations

Teachers' federations, or unions, contribute significantly to educational policy and practice at many levels. While labor law constrains their formal role to advising on policy and negotiating over teachers' material and working conditions, their influence is evident in terms of important practical support for teaching and learning as well as in terms of teachers' leadership roles within schools and the larger educational system. While teachers acknowledge that there are problems inherent in the way federations operate, many feel that if they did not exist it would be necessary to invent them.

Many teachers' organizations across North America, facing

criticism and political challenge, are in the process of reinventing themselves, and OISE/UT research is contributing significantly to these efforts. Nina Bascia has been engaged in a series of research projects over the past eight years that reveal many aspects of teachers' federations' work. These include a study of teachers' perspectives on how federations contribute to their professional identities and the quality of their work lives in three U.S. secondary schools and a study of the work of federation-active teachers in districts in Canada and the U.S.

Bascia has conducted several formal evaluations of

federation-sponsored reform initiatives, including a province-wide professional development project sponsored by the Ontario Teachers' Federation and a U.S.-wide initiative sponsored by the National Education Association. She has just begun a new study of the professional development, curriculum and program development, and political work that is done within teachers' federations under the auspices of a SSHRC-funded research project on nonformal and informal learning practices. These studies contribute to understanding teachers' realities and priorities as well as shedding important light on the necessary supports for teaching.

Anti-Racism Studies

Many students attending school are present in body, but not in mind and soul. Often such students leave school early for pragmatic reasons — for employment or financial need — but there are many others who leave school prematurely or become disengaged from school because they do not respond to the cultural environment or organizational life of mainstream schools. The problem of "disaffected" youth and high drop-out rates has led to a number of research studies at OISE/UT and is a specific area of concern for the Centre for Integrative Anti-Racism Studies in Education headed by George Dei.

Dei has studied the implications of race and social difference for schooling, school dropouts, and disengagement over a number of years and is

now researching forms of "inclusive schooling," or schooling that ensures that excellence is not only accessible to all, but equitable. This includes a critical re-examination of the structures of schooling and linkages with the school community. Thus far, the research has highlighted the need for: (1) more community input into school decision making; (2) expanding in-school support for students; (3) establishing transitional and outreach programs for youth; (4) the adoption of multi-centred approaches to teaching; (5) teacher education and curricular change; and (6) more accountability in school organization.

Contacts with the community are an integral part of this kind of research. Presently Dei is examining exemplary inclusive schooling in dif-

ferent educational sites, with the objective of understanding educational practices which allow for genuine inclusion of all students. These practices address equity and power issues in schooling, ensuring successful learning outcomes for all students and particularly for those coming from racial/ethnic minority and working class family backgrounds.

Working with OISE/UT graduate assistants, Dei is interviewing educators, parents, youth, community workers, and school-community liaison officers to document school, home and community educational/instructional strategies that enable youth to succeed academically and socially. Such knowledge is an untapped resource which may be adapted to advance the educational achievement of all youth.



Technology



Education Commons: Information, Media, Technology

The merger of OISE with the University of Toronto's Faculty of Education has provided an opportunity to design a new approach to information, media, and technology. With the rapid convergence and blurring of boundaries that is taking place in these three areas in the world at large, integration is important in order to take advantage of new opportunities and resources as they emerge. Also, because OISE/UT is committed to innovative research, a new design is required to provide two-way linkages between research and application. The result has been a new entity called the Education Commons. On one hand it integrates what were previously two libraries plus several separate collections, two computer services, two media services, and a distance education office. Beyond that, however, the Education Commons is charged with fostering technologically-enhanced innovation in all of OISE/UT's

varied educational offerings.

The integration of services is already well advanced. Meanwhile, extensive planning is underway dealing with new ventures. These include: a Knowledge Innovation Laboratory, which will be a joint project of the Education Commons, the Knowledge Media Design Institute, and the Telelearning Network of Centres of Excellence projects; the design of a new public-access space that will make the integration of information, media, and technology a reality for the individual student or staff member; and the design of activities to support innovation in uses of learning technologies in campus courses and distance education. A representative steering committee is being established. In the meantime the co-directors of the Education Commons welcome ideas and advice via e-mail to robert.cook@utoronto.ca, judy.snow@oise.utoronto.ca, or cbreiter@oise.utoronto.ca.

Computer Supported Intentional Learning Environment (CSILE)

The CSILE technology developed by OISE/UT cognitive scientists Marlene Scandamaglia and Carl Bereiter, and piloted at Huron Street Public School in Toronto, is both an educational philosophy and a software program, and it represents a new generation of educational technology. It is not business software retrofitted for children; it is technology specifically

designed to support knowledge construction. It provides more than a set of tools; it provides an environment to support the kinds of inquiry, information search, and discussion that go on in research teams and knowledge-building groups of all kinds. Accordingly, its inventors call it "knowledge-building technology." CSILE allows students to build

their understanding of a topic while sitting at personal computers. Using the specifically designed "collaboration" software, students are able to send electronic notes to one another to discuss events, examine factual information, and raise and address questions. Once they have entered their responses to one another in a shared database housed on a work-

Technology is a centrepiece of OISE/UT, most specifically through the creation of the OISE/UT Education Commons. Not only do we expect technology to support our administrative activities to a far greater extent than in the past but, far more importantly, we are fully committed to the use of technology in all activities related to the teaching and learning process for students of all ages.

OISE/UT is engaged in innovative research and development with respect to the application of technology to educational issues. Our faculty, staff, and students have developed educational software which promotes and supports communities of learners at the elementary, secondary, and graduate level. We serve as a research site for university level conferencing software developed by members of the federally funded National Centre of Excellence on Telelearning (the creation of the "virtual" university). Our faculty has access to and support for a number of technology-mediated courses so as to better serve those of our clients who do not live within easy commuting distance of downtown Toronto — as well as those who simply prefer the convenience of the "virtual" campus. Most recently we have begun exploring the possibility of providing a diversity of technology-mediated continuing education programs to clients in Ontario, in Canada, and in other parts of the world.

The implementation of our ambitious plans calls for continuing financial support from OISE/UT and the University as well as from other sources.

group server, they can hone their ideas as they add comments to the growing discussion. Unlike bulletin-board services or electronic mail, the network-based product provides a structure for student-centred inquiry that extends the learning process beyond the traditional boundaries of fact presentation and recall. Classrooms using CSILE are able to engage in

"knowledge" construction through a process that entails problem statement, theory presentation, comment, and the introduction of new information.

CSILE, which is presently being used in classrooms throughout the world, is one of four beacon technologies in the Telelearning Research Network. Soon, a new website version of CSILE will be ready for testing.



Distance Education Programs

Using technology to augment the on-campus course and program offerings of OISE/UT makes lifelong learning a more realistic option than ever before.

Computers, in particular, provide the means for people to continue their formal education while continuing to work at their jobs, raise their families, and maintain their responsibilities to family and community. Although graduate programs have long been an option for those who live near universities or can arrange the time to travel to attend class for six weeks in the summer, technology-mediated distance education programs now mean that the same opportunities for learning are available to a much larger group of people.

In a typical OISE/UT computer-mediated graduate class presently in progress, the 19 students are participating from locations in California, the Northwest Territories, British Columbia, Prince Edward Island, Nova Scotia, Quebec, and points across

Ontario. The instructor conducts the class from a centre more than 1000 kilometres from OISE/UT in Toronto. The students are elementary and secondary school teachers, college instructors, industrial trainers, and private consultants who all bring their daily experiences to class to enrich the discussion and apply a broad set of perspectives to the topics being examined. Other classes include students from such diverse cultures and locations as Egypt, Malaysia, the Caribbean, and New Zealand.

Distance education takes the university from the campus to people and places around the globe. It makes learning an integral part of the lives of students instead of an island distant from the reality of living in the everyday world. Through the use of technology, bridges never before possible now span the global community allowing the flow of a constant stream of communication and learning.



Technology at UTS

The University of Toronto Schools (UTS) offers an accelerated academic program for students from Grade 7 to university who have passed the competitive entrance exam. Websites and the Internet, Power Point presentations and computer projection

units, lasers and probes, and GIS data bases are all classroom tools at this "laboratory," or model, school for OISE/UT.

One exciting technology-based initiative involves a class of Grade 10 students who are helping to build a multidisciplinary database for a large-scale OISE/UT study on the impact of computers on society. This work-

in-progress, under the direction of psychologist Daniel Keating, is being conducted in association with the Canadian Institute for Advanced Research.

With the help of OISE/UT, UTS has been able to set up an e-mail conferencing system which links staff and students to one another, to other parts of the university community,

and to other schools and school systems. All staff and students have their own Internet e-mail accounts. This system is presently being extended to parents and alumni, leading to the creation of UTS' own virtual community and allowing communication between home and school to proceed without the usual avalanche of paper.

UTS presently belongs to an infor-

mation technology consortium, ED-Net 2, an education/business partnership of Toronto area and northern Ontario schools, two campuses of the University of Toronto, Shaw Cable, Silicon Graphics, and a variety of other corporate partners. UTS looks forward to the curricular opportunities that this partnership will afford its students in this decade and the next.

Telelearning Research Network

Telelearning is a multi-media approach to education based on computers, artificial intelligence, and networks linked by the Internet. The researchers in the Telelearning Network are studying the most up-to-date multi-media environments and linking them to emerging and novel approaches to teaching and learning.

The Network team, managed by Simon Fraser communication scientists Linda Harasim and Tom Calvert, consists of over 100 university researchers across the country who are working with leaders in business and education to design and field-test the most promising of these technology-based

educational approaches. The OISE/UT participation in the Network is significant, with a number of faculty providing leadership in the application of telelearning to teacher education programs, to schools (kindergarten through the end of high school), and to community colleges.

The Network is one of 15 Canadian Centres of Excellence working in multidisciplinary teams to link research and development with wealth creation. This federal initiative is part of a strategy to mobilize research talent in the academic, public, and private sectors and apply it to improving the quality of life for Canadians.

facts about our programs

at OISE/UT

A Snapshot

The establishment of the Ontario Institute for Studies in Education of the University of Toronto (OISE/UT) on July 1, 1996 integrated the following:

- Ontario Institute for Studies in Education (OISE)
- Faculty of Education, University of Toronto (FEUT), including:
 - University of Toronto Schools (UTS)
 - Institute of Child Study (ICS)

Toronto Locations

252 Bloor Street West
371 Bloor Street West (includes UTS)
45 Walmer Road (ICS)

Enrolment

- Preservice Teacher Education 1101
- Continuing Education*
 - Summer 3724
 - Winter 1815
- Graduate Studies*
 - Master's 1397
 - Doctoral 940

Laboratory Schools

- ICS 195
- UTS 500

Faculty and Staff (1996-97)

- Tenured/Tenure Stream
- Tutorial Faculty 176
- Additional Instructional Staff 24
- Administrative Staff 171
- UTS 38
- ICS 10

Departments

- Adult Education, Community Development

- and Counselling Psychology
- Curriculum, Teaching and Learning
- Human Development and Applied Psychology
- Department of Sociology and Equity Studies in Education
- Theory & Policy Studies in Education

Internal Research Centres

- Centre for Applied Cognitive Science
- Centre de recherches en éducation franco-ontarienne
- Centre for Teacher Development
- Centre for Women's Studies in Education
- Comparative, International & Development Education Centre
- Dr. R.G.N. Laidlaw Research Centre (ICS)
- International Institute for Global Education
- Modern Language Centre

OISE/UT Field Centres

- Centre for Leadership Development (Toronto)
- Centre de recherches en éducation du Nouvel-Ontario (Sudbury)
- Midnorthern/Northeastern Centre (Sudbury/North Bay)
- Midwestern Centre (Kitchener)
- Niagara Centre (St. Catharines)
- Northwestern Centre (Thunder Bay)
- Ottawa Valley Centre (Nepean)
- Trent Valley Centre (Peterborough)

Educational Commons

- Libraries
- Computing Services
- Media Services
- Distance Education

Laboratory Schools

The Institute of Child Study

ICS operates a laboratory school which is a day school for children from 3 to 12 years of age, and an Infant Centre. Both serve as resources for students in the Diploma/Master's program as well as for those engaged in research activities. The Laidlaw Research Centre is affiliated with ICS.

The University of Toronto Schools

UTS is a day school for students from Grade 7 to university entrance, selected by competitive examination. The Ontario curriculum leading to university entrance is followed, with opportunities for enrichment, acceleration, independent study, and experimentation. Resources of the school are available to staff and students of OISE/UT for teaching practice, demonstration, and experiment.

Continuing Education

The Continuing Education Program offers an extensive array of courses, both credit and non-credit. Courses leading to Additional Qualifications (AQ) approved by the Ministry of Education and Training for holders of the Ontario Teacher's Certificate are offered through part-time study. Additional Qualifications courses offered in winter and summer, and intercession include

Diploma Qualifications — Primary, Junior, Intermediate and Senior; Three-session courses include: Honour Specialist Qualifications; Principals' Certification; and Technological Studies Qualifications.

For complete information, please consult the *Additional Qualifications OISE/UT Calendar*, available from the Registrar's Office, Continuing Education Division.

Graduate Studies

- The Master's and doctoral degree programs with Ontario Council on Graduate Studies (OCGS) approval are listed here. For full information about OISE/UT specializations, please consult the course Bulletin,
- available from the Registrar's Office, Graduate Degrees Unit.
- Adult Education
- Computer Applications
- Counselling Psychology
- Curriculum
- Educational

- Administration
- Higher Education and Evaluation
- History of Education
- Master of Arts in Child Study and Education (our only graduate program leading to an OTC)
- Master of Arts in Teaching (English)
- Measurement and Evaluation
- Philosophy of Education
- School Psychology
- Department of Sociology and Equity Studies in Education
- Special Education
- Teacher Development

Educational Research

The research and development programs of OISE/UT seek to foster improvement in education and to complement the academic programs of the education faculty. OISE/UT's research program is among the largest in

education in the world, attracting \$4,000,000 of research dollars in 1996-97. The internal research centres, listed on this page, represent strong and established R & D traditions at OISE/UT.

Field Development and Outreach to the Educational Community

The purpose of OISE/UT's field development activities is to stimulate beneficial change in education in Ontario. To this end, OISE/UT administers seven regional field centres. The Centre for Leadership Development, housed in the Department of Theory and Policy Studies in Education, also has field development responsibilities. Two of the centres (Ottawa and Sudbury) provide services for

francophone clients. Some OISE/UT departments offer off-campus graduate courses at one or more of these regional locations. Field development activities also include a very large Additional Qualifications Program for Teachers (under Continuing Education) as well as the Learning Consortium, OISE/UT's partnership with four Ontario school boards in the greater Metropolitan Toronto area.

Preservice Teacher Education

For complete information about the Preservice Teacher Education programs, please consult the Preservice OISE/UT Calendar, available from the Registrar's Office, Preservice Unit.

- Bachelor of Education/ Ontario Teacher's Certificate (OTC)
- Primary/Junior; Junior/Intermediate; and Intermediate/ Senior
- Diploma in Technical Education/ Ontario Teacher's Certificate (OTC)
- Master of Arts in Child Study and Education/ Ontario Teacher's Certificate (OTC)

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For information about OISE/UT programs

Preservice Teacher Education
(416) 978-8833

Master of Arts in Child Study
and Education/Ontario
Teacher's Certificate
(416) 978-3457

Continuing Education
(416) 978-5988

Graduate Degrees in
Education
(416) 923-6641 ext. 2663
or 1-800-785-3345

International Projects
(416) 923-6641 ext. 2361

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